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PUBLIC UTILITIES COMMISSION

July 27, 2006

The Honorable Chairman and Members of the
Hawaii Public Utilities Commission
465 South King Street
Kekuanaoa Building, Room 103
Honolulu, HI 96813
Attention: Michael Azama, Esq.

Re: Docket No. 03-0371 - In re Public Utilities Commission Regarding Instituting a Proceeding to Investigate Distributed Generation in Hawaii: Proposed Tariff Establishing Interconnection Procedures, a Standardized Interconnection Agreement and Reliability and Safety Requirements for Kauai Island Utility Cooperative ("KIUC")

Dear Chairman and Commissioners:

Ordering Paragraphs 4 and 5 (Article III, Parts 4 and 5) of Decision and Order No. 22248, filed on January 27, 2006, in the above-referenced docket, requires KIUC to establish, by proposed tariff, a non-discriminatory interconnection policy, a standardized interconnection agreement, and reliability and safety requirements for distributed generation that is connected to its distribution system.[1] Pursuant to said Ordering Paragraphs, please find enclosed for Commission review and approval Exhibit 1 attached hereto, which contains KIUC's proposed interconnection policies and procedures, a proposed interconnection agreement (Attachment 9), as well as the various proposed safety, reliability and other requirements to govern the interconnection of a generator to KIUC's electric system. For assistance in the Commission's review, enclosed as Exhibit 2 hereto please find illustrative flow charts prepared by KIUC summarizing and setting forth the various processes envisioned by KIUC as part of the enclosed policies and procedures.

[1] Ordering Paragraph 4 states the following:

> The [C]ommission requires that each utility establish reliability and safety requirements, by proposed tariff for approval by the [C[ommission, for distributed generation that is connected to the electric utility's distribution system.

Ordering Paragraph 5 states the following:

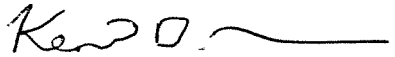
> The [C]ommission requires that each utility establish a non-discriminatory interconnection policy, by proposed tariff for approval by the [C]ommission, that entitles distributed generation to interconnect when it can be done safely, reliably, and economically. The [C]ommission also requires the utilities to develop a standardized interconnection agreement, by proposed tariff for approval by the [C]ommission, to streamline the distributed generation application review process and eliminate long lead times that may lead to cancellation of a beneficial project. . . .

As further discussed in the Introduction and Background section of the policies and procedures (page 3 of Exhibit 1), in establishing these policies and procedures, KIUC decided not to limit the application of these policies and procedures to only distributed generation facilities, but to any generators less than or equal to 20 megawatts ("MW") in size. In addition, as a starting point in preparing these policies and procedures, KIUC utilized the standard procedures recently issued by the Federal Energy Regulatory Commission on May 12, 2005 to govern the interconnection of generators no larger than 20 MW.

In connection with the above, KIUC hereby respectfully requests that the Commission review and approval as a new tariff Exhibit 1 attached hereto. In doing so, KIUC requests that, if approved, Exhibit 1 will be considered an entirely new tariff for KIUC (i.e., Tariff No. 2) that will be entirely separate and apart from KIUC's existing Commission-approved Tariff No. 1 governing KIUC's general provisions of electric service to all of its customers on the island of Kauai. Upon the Commission's review and approval of the enclosed, KIUC will re-format the entire document consistent with the generally accepted tariff formats approved by the Commission including, without limitation, (1) the addition of a check list sheet; (2) headers and footers to each page referencing the appropriate issuance and effective dates; and (3) the insertion of tariff sheet numbering.

If you should have any questions, please do not hesitate to contact the undersigned. Thank you for your consideration.

Very truly yours,



Kent D. Morihara

Enclosures

cc: Consumer Advocate
Mr. William A. Bonnet
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Thomas Williams, Esq.
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Mr. Glenn Sato

EXHIBIT 1

KAUAI ISLAND UTILITY COOPERATIVE

SMALL GENERATOR INTERCONNECTION POLICIES AND PROCEDURES

(For Generating Facilities No Larger Than 20 MW)

EXHIBIT 1

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Introduction and Background of Policies and Procedures

In October 2003, the Hawaii Public Utilities Commission ("Commission") opened an investigation in Docket No. 03-0371 to examine the potential benefits and impacts of distributed generation on Hawaii's various electric distribution systems and markets, including the electric system on the island of Kauai owned by Kauai Island Utility Cooperative, an electric cooperative ("KIUC"). For many years, almost all of Kauai's electricity was generated by this electric system utilizing large central station generation units. "Distributed generation," in contrast, involves the use of small scale electric generating technologies at, or close proximity to, the end-user, or customer, location.

In Decision and Order No. 22248, filed on January 27, 2006 in the above docket, the Commission set forth its general policy to "promote the development of a market structure that assures: (a) distributed generation is available at the lowest feasible cost; (b) distributed generation that is economical and reliable has an opportunity to come to fruition; and (c) distributed generation that is not cost-effective does not enter the system." Decision and Order No. 22248, at 12. In doing so, the Commission recognized the following issue and factors that must be taken into consideration with respect to distributed generation and its implementation or interconnection with each island's electric system:

1. Distributed generation should be implemented in a manner that does not reduce the reliability or safety of the electric utility's distribution system. Distributed generation differs from conventional generation because generators enter the arena without being planned or controlled automatically, by the local electric utility. *Id.* at 30.
2. Despite numerous generators connected to, or injecting power into, the electric utility system, the system must remain in balance at all times. Specifically, at all times, (a) generation and demand must be equal, (b) sufficient generation must be available to provide voltage support on the lines, (c) sufficient capacity must exist on the distribution lines to move electricity, and (d) there must be surplus generation, transmission and distribution capacity available and ready to respond to sudden changes in demand. A new load, a new generation source, or a loss of either can cause system imbalance, with results ranging from damaged computer equipment to large-scale blackouts. The prevention of this requires coordination between distributed generators and the utility. *Id.* at 30-31.
3. The complexity of a distributed generation unit's interconnection with the island's electric system will vary on a case-by-case basis, depending upon (a) the type of distributed generation technology, (b) the fuel source, either fossil or renewable, (c) the power system interface, (d) the extent of interaction required between the customer-generator and the utility, and (e) the architecture of the distribution system into which the distributed generation is interconnected. *Id.* at 34.
4. Technical interconnection requirements require a determination with respect to which distributed generation facilities should be eligible for interconnection and the standard terms and conditions for interconnection. *Id.* at 34.

5. Requiring each customer-generator to negotiate a complex interconnection agreement anew may create an unnecessary barrier to entry and may discourage the interconnection of small, cost-effective distributed generation projects. *Id.* at 34-35.
6. The absence of clear interconnection requirements can produce unnecessary costs, in the form of inflexibility, long-lead times, lack of standardization, and possible cancellation of a project beneficial to the customer-generator and the electric utility's customers. *Id.* at 35.
7. Interconnection of new generators to the electric utility's distribution system affects system reliability. Therefore, customer-generators must coordinate generator additions with the distribution operator. However, the expense and time associated with interconnection studies can make them a barrier to entry for the new customer-generator. *Id.* at 36.
8. In some cases, the entrance of a new generator will require the electric utility to upgrade its distribution system, or install equipment to maintain its safety and reliability. There is a possibility that the required protective equipment already exists with the new generating facilities. Disputes therefore may rise as to whether the electric utility is insisting on redundant equipment. *Id.* at 37.
9. The benefits of distributed generation to the grid may increase if the electric utility can dispatch the customer's units or coordinate their operation with the utility's own units. On the other hand, customers may wish to maintain control of the generation to assure sufficient power resources for themselves. *Id.* at 38.
10. Generators create economic risks, which may result in disputes arising as to whether customer-generators should have liability insurance, and in what amounts and forms it should be required. On the other hand, allowing the utility to impose excessively high liability insurance requirements deters small distributed generation facilities. *Id.* at 38.
11. Prospective customer-generators should not have to contend with long delays in processing their applications, confusion over which persons within the electric utility are responsible for which matters, and unfamiliarity within the utility over the engineering and economics of distributed generation projects. Prospective customer-generators are also entitled to have their confidential information protected. *Id.* at 39.
12. To build and operate a distributed generation project, costs must be incurred by both the customer-generator and the electric utility. The customer-generator will incur the up-front capital costs for construction and installation, as well as ongoing operating costs such as fuel and maintenance. The utility has to incur costs to accommodate the customer-generator. The utility-incurred costs include: (a) costs to complete interconnection and pre-interconnection studies, (b) costs incurred to acquire and operate generation, transmission, or distribution facilities necessary to provide electric service to the customer-generation (i.e., distribution system costs), (c) costs of utility system facilities, built on the expectation that the customer's load will be there, which would be rendered unrecoverable if the customer-generator reduces its purchases in favor of the customers' own

> generation (i.e., unrecovered costs). To ensure that only economic distributed generation projects are developed, and that there is no cost shifting from the customer-generator to other customers or to utility shareholders, utility-incurred costs must be allocated properly so that those costs that benefit the distributed generation project are borne by the project. *Id.* at 40-47.

To carry out the above, the Commission stated in Decision and Order No. 22248 that it would "take those actions that are necessary to promote the installation of distribution generation that is economically efficient and reliable." *Id.* at 12. Among the actions taken by the Commission in said Decision and Order No. 22248 were to require that each electric utility: (1) establish a non-discriminatory interconnection policy that entitles distributed generation to interconnect to the island's electric system when it can be done safely, reliably and economically, (2) develop a standardized interconnection agreement to streamline the distributed generation application review process and eliminate long lead times that may lead to the cancellation of a beneficial project, and (3) establish reliability and safety requirements for distributed generation that is connected to the electric utility's system. *Id.* at 46-47.

With respect to the interconnection policy requirement, the Commission stated that the interconnection policy to be established by each electric utility must encompass the following seven areas: (1) interconnection, (2) pre-interconnection studies, (3) distribution system upgrades required for integration, (4) responsibility for control and operation of distributed generation equipment, (5) indemnification and liability insurance, (6) communication with customers, and (7) dispute resolution. *Id.* at 35 and 46-47. With respect to the standardized interconnection agreement, the Commission stated that the agreement must outline: (1) the obligations of the electric utility relative to customer notification and communication requirements; (2) time lines for completion; (3) allowances for pre-interconnection studies and charges; (4) provisions for third party interconnection studies; and (5) disconnection and reconnection requirements. *Id.* at 36. This standardized agreement must also incorporate specific interconnection standards adopted by the Institute of Electrical and Electronic Engineers or other recognized standard-setting groups and require the use of standard applications, provided by the customer-generator to the utility. *Id.*

These Policies and Procedures and its various attachments have been prepared by KIUC as a result of and pursuant to the Commission's policy and requirements summarized above and set forth within Decision and Order No. 22248. Specifically, these Policies and Procedures set forth the policies, procedures and requirements that must be followed by both KIUC and generation units connected or that propose to be connected in parallel with KIUC's electric system. In establishing these Policies and Procedures, KIUC decided not to limit the application of these Policies and Procedures to only distributed generation facilities, but to any generators less than or equal to 20 megawatts ("MW") in size. In doing so, KIUC utilized as its starting point in preparing these Policies and Procedures the standard procedures issued by the Federal Energy

Regulatory Commission ("FERC") on May 12, 2005 to govern the interconnection of generators no larger than 20 MW.[1]

These Policies and Procedures were approved by the Commission in Decision and Order No. _____ filed on _____, in Docket No. _____.

Section 1. Application

1.1 Applicability

1.1.1 A request to interconnect a certified Small Generating Facility (See Attachments 3 and 4 for description of certification criteria) no larger than 2 MW shall be evaluated under the Section 2 Fast Track Process. A request to interconnect a certified inverter-based Small Generating Facility no larger than 10 kW shall be evaluated under the Attachment 5 10 kW Inverter Process. A request to interconnect a Small Generating Facility larger than 2 MW but no larger than 20 MW or a Small Generating Facility that does not pass the Fast Track Process or the 10 kW Inverter Process, shall be evaluated under the Section 3 Study Process.

1.1.2 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of these Policies and Procedures.

1.2 Pre-Application

KIUC shall designate an employee or office from which information on the application process can be obtained through informal requests from the Interconnection Customer presenting a proposed project for a specific site. Electric system information provided to the Interconnection Customer should include relevant system studies, interconnection studies, and other materials useful to an understanding of an interconnection at a particular point on KIUC's Transmission and Distribution System, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. KIUC shall comply with reasonable requests for such information.

1.3 Interconnection Request

The Interconnection Customer shall submit its Interconnection Request to KIUC, together with the processing fee or deposit specified in the Interconnection Request. If the Interconnection Request is incomplete, KIUC shall provide along with the notice that

[1] FERC issued its standard procedures for the interconnection of generators no larger than 20 MW pursuant to FERC Order No. 2006 issued on May 12, 2005 in Docket No. RM02-12-000. These standard procedures reflect input from a broad-based group of utilities, small generators, state commission representatives, and other interested entities who came together to recommend a unified approach to small generator interconnection. The end result reflects many of these consensus positions as well as those of the National Association of Regulatory Utility Commissioners.

the Interconnection Request is incomplete, a written list detailing all information that must be provided to complete the Interconnection Request. The Interconnection Customer will have 10 Business Days after receipt of the notice to submit the listed information or to request an extension of time to provide such information. If the Interconnection Customer does not provide the listed information or a request for an extension of time within the deadline, the Interconnection Request will be deemed withdrawn. An Interconnection Request will be deemed complete upon submission of the listed information to KIUC.

1.4 Modification of the Interconnection Request

Any modification to machine data or equipment configuration or to the interconnection site of the Small Generating Facility not agreed to in writing by KIUC and the Interconnection Customer may be deemed a withdrawal of the Interconnection Request and may require submission of a new Interconnection Request, unless proper notification of each Party by the other and a reasonable time to cure the problems created by the changes are undertaken.

1.5 Site Control

Documentation of site control must be submitted with the Interconnection Request. Site control may be demonstrated through:

1.5.1 Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Small Generating Facility;

1.5.2 An option to purchase or acquire a leasehold site for such purpose; or

1.5.3 An exclusivity or other business relationship between the Interconnection Customer and the entity having the right to sell, lease, or grant the Interconnection Customer the right to possess or occupy a site for such purpose.

Section 2. Fast Track Process

2.1 Applicability

The Fast Track Process is available to an Interconnection Customer proposing to interconnect its Small Generating Facility with KIUC's electric system if the Small Generating Facility is no larger than 2 MW and if the Interconnection Customer's proposed Small Generating Facility meets the codes, standards, and certification requirements of Attachments 3 and 4 of these Policies and Procedures, or KIUC has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

2.2 Initial Review

Upon determining that it has received a complete Interconnection Request, KIUC will notify the Interconnection Customer accordingly. Thereafter, KIUC shall perform an

initial review using the screens set forth below, and shall then notify the Interconnection Customer of the results of the review, and include with the notification copies of the analysis and data underlying KIUC's determinations under the screens.

2.2.1 Screens

2.2.1.1 The proposed Small Generating Facility's Point of Interconnection must be on a portion of KIUC's Distribution System.

2.2.1.2 For interconnection of a proposed Small Generating Facility to a radial distribution circuit, the aggregated generation, including the proposed Small Generating Facility, on the circuit shall not exceed 15 % of the line section annual peak load as most recently measured at the substation. A line section is that portion of KIUC electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.

2.2.1.3 For interconnection of a proposed Small Generating Facility to the load side of spot network protectors, the proposed Small Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5 % of a spot network's maximum load or 50 kW[2].

2.2.1.4 The proposed Small Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than 10 % to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

2.2.1.5 The proposed Small Generating Facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5 % of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5 % of the short circuit interrupting capability.

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[2] A spot Network is a type of distribution system found within modern commercial buildings to provide high reliability of service to a single customer. (Standard Handbook for Electrical Engineers, 11th edition, Donald Fink, McGraw Hill Book Company)

2.2.1.6 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on KIUC's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	**Type of Interconnection to Primary Distribution Line**	**Result/Criteria**
Three-phase, three wire	3-phase or single phase, phase-to-phase	Pass screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass screen

2.2.1.7 If the proposed Small Generating Facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Small Generating Facility, shall not exceed 20 kW.

2.2.1.8 If the proposed Small Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20 % of the nameplate rating of the service transformer.

2.2.1.9 The Small Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Small Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the point of interconnection).

2.2.1.10 No construction of facilities by KIUC on its own system shall be required to accommodate the Small Generating Facility.

2.2.2 If the proposed interconnection passes the screens, the Interconnection Request shall be approved and KIUC will provide to the Interconnection Customer an executable Interconnection Agreement (Attachment 9).

2.2.3 If the proposed interconnection fails the screens, but KIUC determines that the Small Generating Facility may nevertheless be interconnected consistent with

safety, reliability, and power quality standards, KIUC shall provide to the Interconnection Customer an executable Interconnection Agreement (Attachment 9).

2.2.4 If the proposed interconnection fails the screens, but KIUC does not or cannot determine from the initial review that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, KIUC shall provide the Interconnection Customer with the opportunity to attend a customer options meeting as discussed immediately below.

2.3 Customer Options Meeting

If KIUC determines the Interconnection Request cannot be approved without minor modifications at minimal cost; or a supplemental study or other additional studies or actions; or at significant cost to address safety, reliability, or power quality problems, KIUC shall notify the Interconnection Customer and provide copies of all data and analyses underlying its conclusion. As part of the notice, KIUC shall offer to convene a customer options meeting between KIUC and the Interconnection Customer to review possible Interconnection Customer facility modifications and/or the screen analysis and related results, to determine what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of KIUC's determination, or at the customer options meeting, KIUC shall:

2.3.1 Offer to perform facility modifications or minor modifications at the Interconnection Customer's expense to KIUC's electric system (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the cost to make such modifications to KIUC's electric system; or

2.3.2 Offer to perform a supplemental review at the Interconnection Customer's expense if KIUC concludes that the supplemental review might determine that the Small Generating Facility could continue to qualify for interconnection pursuant to the Fast Track Process, and provide a non-binding good faith estimate of the costs of such review; or

2.3.3 Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under the Section 3 Study Process.

2.4 Supplemental Review

If the Interconnection Customer agrees to a supplemental review, the Interconnection Customer shall provide its agreement in writing and submit a deposit for the estimated costs within 15 Business Days of the offer. The Interconnection Customer shall be responsible for KIUC's actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within

20 Business Days of receipt of the invoice. If the deposit exceeds the invoiced costs, KIUC will return such excess within 30 Business Days of the invoice without interest.

2.4.1 After receipt of the deposit for a supplemental review, KIUC will conduct the supplemental review and will determine if the Small Generating Facility can be interconnected safely and reliably.

2.4.1.1 If so, KIUC shall forward an executable Interconnection Agreement (Attachment 9) to the Interconnection Customer if no Interconnection Customer facility modifications or other modifications are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under these Policies and Procedures.

2.4.1.2 Or, if so, but Interconnection Customer facility modifications are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under these Policies and Procedures, KIUC shall forward an executable Interconnection Agreement (Attachment 9) to the Interconnection Customer only after receiving confirmation that the Interconnection Customer has agreed in writing to make the necessary changes at the Interconnection Customer's cost.

2.4.1.3 Or, if so, but only minor modifications to KIUC's electric system are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under the Fast Track Process, KIUC shall forward an executable Interconnection Agreement (Attachment 9) to the Interconnection Customer, which Agreement shall require that the Interconnection Customer pay for the costs of such system modifications prior to interconnection.

2.4.1.4 Or, if not, the Interconnection Request will continue to be evaluated under the Section 3 Study Process set forth in these Policies and Procedures.

Section 3. Study Process

3.1 Applicability

The Study Process shall be used by an Interconnection Customer proposing to interconnect its Small Generating Facility with KIUC's electric system if the Small Generating Facility (1) is larger than 2 MW but no larger than 20 MW, (2) is not certified, or (3) is certified but did not pass the Fast Track Process or the 10 kW Inverter Process.

3.2 Scoping Meeting

3.2.1 A scoping meeting will be held after the Interconnection Request is deemed complete by KIUC. KIUC and the Interconnection Customer will bring to the meeting those personnel, including system engineers and other resources, as may be reasonably required to accomplish or facilitate the purpose of the meeting.

3.2.2 The purpose of the scoping meeting is to discuss the Interconnection Request and review any existing studies relevant to the Interconnection Request. The Parties shall further discuss whether KIUC should perform a feasibility study or proceed directly to a system impact study, or a facilities study, or an interconnection agreement. If the Parties agree that a feasibility study should be performed, KIUC shall complete and provide the Interconnection Customer with the feasibility study agreement (Attachment 6) as soon as practicable, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, the costs of which are to be borne by the Interconnection Customer. Notwithstanding anything herein to the contrary, in the event the Parties are not able to agree on whether to perform a feasibility study or to proceed directly to a system impact study, or a facilities study, or to an interconnection agreement, then the greater of the two requirements being proposed shall control (e.g., if one Party believes that a feasibility study shall be performed while the other does not, then a feasibility study shall be performed).

3.2.3 The scoping meeting may be omitted only by mutual agreement of the Parties. In order to remain in consideration for interconnection, an Interconnection Customer must execute and return the feasibility study agreement within 15 Business Days, unless extended in writing by KIUC. If the Parties agree not to perform a feasibility study, KIUC shall provide to the Interconnection Customer a system impact study agreement (Attachment 7), including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, the costs of which are to be borne by the Interconnection Customer.

3.3 Feasibility Study

3.3.1 The feasibility study, which may be performed and prepared by either KIUC or a consultant retained by KIUC, shall identify any potential adverse system impacts that would result from the interconnection of the Small Generating Facility. In the event KIUC elects to retain a consultant to perform and prepare the feasibility study, KIUC shall notify the Interconnection Customer of the consultant that KIUC plans to retain. The Interconnection Customer shall then have 5 Business Days from the receipt of such notice to object to the hiring of the proposed consultant. The Parties shall then have 15 Business Days to either reach an agreement on the proposed consultant or on another consultant to perform said

study. If no agreement can be reached within that timeframe, then the dispute resolution provisions set forth in Section 4.1 below shall apply.

3.3.2 A deposit of the greater of 50 percent of the good faith estimated feasibility study costs or earnest money of $1,000 shall be required from the Interconnection Customer before the feasibility study commences.

3.3.3 The scope of and cost responsibilities for the feasibility study are described in the attached feasibility study agreement (Attachment 6).

3.3.4 If the feasibility study shows no potential for adverse system impacts, KIUC shall send the Interconnection Customer a facilities study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, the costs of which are to be borne by the Interconnection Customer. If no additional facilities are required, KIUC shall provide to the Interconnection Customer an executable Interconnection Agreement (Attachment 9).

3.3.5 If the feasibility study shows the potential for adverse system impacts, the review process shall proceed to the appropriate system impact study(s), as further discussed immediately below.

3.4 System Impact Study

3.4.1 A system impact study, which may be performed and prepared by either KIUC or a consultant retained by KIUC, shall identify and detail the electric system impacts that would result if the proposed Small Generating Facility were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts identified in the feasibility study, or to study potential impacts, including but not limited to those identified in the scoping meeting. A system impact study shall evaluate the impact of the proposed interconnection on the reliability of KIUC's electric system. In the event KIUC elects to retain a consultant to perform and prepare the system impact study, KIUC shall notify the Interconnection Customer of the consultant that KIUC plans to retain. The Interconnection Customer shall then have 5 Business Days from the receipt of such notice to object to the hiring of the proposed consultant. The Parties shall then have 15 Business Days to either reach an agreement on the proposed consultant or on another consultant to perform said study. If no agreement can be reached within that timeframe, then the dispute resolution provisions set forth in Section 4.1 below shall apply.

3.4.2 If no transmission system impact study is required, but potential electric power Distribution System adverse system impacts are identified in the scoping meeting or shown in the feasibility study, a distribution system impact study must be

performed. KIUC shall provide to the Interconnection Customer a distribution system impact study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study (the costs of which are to be borne by the Interconnection Customer), or following the scoping meeting if no feasibility study is to be performed.

3.4.3 In instances where the feasibility study or the distribution system impact study shows potential for transmission system adverse system impacts, KIUC shall provide to the Interconnection Customer a transmission system impact study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study (the costs of which are to be borne by the Interconnection Customer), if such a study is required.

3.4.4 If a transmission system impact study is not required, but electric power Distribution System adverse system impacts are shown by the feasibility study to be possible and no distribution system impact study has been conducted, KIUC shall provide to the Interconnection Customer a distribution system impact study agreement.

3.4.5 If the feasibility study shows no potential for transmission system or Distribution System adverse system impacts, KIUC shall provide to the Interconnection Customer either a facilities study agreement (Attachment 8), including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study (the costs of which are to be borne by the Interconnection Customer), or an executable Interconnection Agreement (Attachment 9), as applicable.

3.4.6 In order to remain under consideration for interconnection, the Interconnection Customer must execute and return all system impact study agreements, if applicable, within 30 Business Days, unless extended in writing by KIUC.

3.4.7 A deposit of the good faith estimated costs for each system impact study may be required from the Interconnection Customer in KIUC's discretion.

3.4.8 The scope of and cost responsibilities for a system impact study are described in the attached system impact study agreement.

3.5 Facilities Study

3.5.1 Once the required system impact study(s) is completed, a system impact study report shall be prepared by KIUC and transmitted to the Interconnection Customer along with a facilities study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the facilities study (the costs of which are to be borne by the Interconnection

Customer). In the case where one or both impact studies are determined to be unnecessary, a notice of the fact shall be transmitted by KIUC to the Interconnection Customer within the same timeframe.

3.5.2 In order to remain under consideration for interconnection, the Interconnection Customer must execute and return the facilities studies agreement within 30 Business Days, unless extended in writing by KIUC.

3.5.3 The facilities study, which may be performed and prepared by either KIUC or a consultant retained by KIUC in its discretion, shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s).

3.5.4 Design for any required Interconnection Facilities and/or Upgrades shall be performed under the facilities study agreement. KIUC may contract with consultants to perform activities required under the facilities study agreement. The Interconnection Customer and KIUC may agree to allow the Interconnection Customer to separately arrange for the design of some of the Interconnection Facilities. In such cases, facilities design will be reviewed and/or modified prior to acceptance by KIUC, under the provisions of the facilities study agreement. If the Parties agree to separately arrange for design and construction, and provided security and confidentiality requirements can be met, KIUC shall make sufficient information available to the Interconnection Customer in accordance with confidentiality and critical infrastructure requirements to permit the Interconnection Customer to obtain an independent design and cost estimate for any necessary facilities.

3.5.5 A deposit of the good faith estimated costs for the facilities study may be required from the Interconnection Customer in KIUC's discretion.

3.5.6 The scope of and cost responsibilities for the facilities study are described in the attached facilities study agreement.

3.5.7 Upon completion of the facilities study, and subject to the Interconnection Customer agreeing in writing to pay for Interconnection Facilities and Upgrades identified in the facilities study, KIUC shall provide to the Interconnection Customer an executable Interconnection Agreement (Attachment 9) within 15 Business Days of the completion of said study or receipt of the written agreement by the Interconnection Customer to pay for said Interconnection Facilities and Upgrades, whichever is later.

Section 4. Provisions that Apply to All Interconnection Requests

4.1 Disputes

4.1.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this Section.

4.1.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

4.1.3 If the dispute has not been resolved within 10 Business Days after receipt of the Notice, either Party shall have the right to request that the Commission serve as an arbiter of last resort. In such an event, the Commission will use an informal expedited process to resolve the dispute within 30 days of the date of the request. In doing so, the Commission shall have the right to authorize its Chairman, or his/her designee (which designee may be another Commissioner, a member of the Commission staff, a Commission hearings officer, or a Commission hired consultant) to take any such action on behalf of the Commission, in consultation with other Commissioners and Commission staff. There shall be no right to hearing or appeal from this informal expedited dispute resolution process.

4.1.4 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half each of any costs paid to neutral third parties.

4.1.5 If neither Party elects to seek assistance from the Commission, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of these Policies and Procedures.

4.2 Interconnection Metering

Any metering necessitated by the use of the Small Generating Facility shall be installed at the Interconnection Customer's expense in accordance with state, or local regulatory requirements or KIUC's specifications.

4.3 Commissioning

Commissioning tests of the Interconnection Customer's installed equipment shall be performed pursuant to applicable codes and standards. KIUC shall provide reasonable advance notice of the tests and may be present to witness the commissioning tests.

4.4. Confidentiality

4.4.1 Confidential information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of these Policies and

Procedures, all design, system or operating specifications, and metering data provided by or to the Interconnection Customer shall be deemed confidential information regardless of whether it is clearly marked or otherwise designated as such.

4.4.2 Notwithstanding the above, Confidential Information does not include information in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce these Policies and Procedures. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under these Policies and Procedures, or to fulfill legal or regulatory requirements.

4.4.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

4.4.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

4.5 Comparability

KIUC shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this document. KIUC shall use the same reasonable efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Small Generating Facility is owned or operated by KIUC, its subsidiaries or affiliates, or others.

4.6 Record Retention

KIUC shall maintain for three years records, subject to audit, of all Interconnection Requests received under these Policies and Procedures, the times required to complete Interconnection Request approvals and disapprovals, and justification for the actions taken on the Interconnection Requests.

4.7 Interconnection Agreement

After receiving an Interconnection Agreement from KIUC (Attachment 9), the Interconnection Customer shall have 30 Business Days, unless otherwise agreed to by KIUC in writing, to sign and return the interconnection agreement. If the Interconnection Customer does not sign the interconnection agreement within the established timeframe, the Interconnection Request shall be deemed withdrawn. After the Interconnection

Agreement is signed by the Parties, the interconnection of the Small Generating Facility shall proceed under the provisions of the Interconnection Agreement.

4.8 Capacity of the Small Generating Facility

4.8.1 If the Interconnection Request is for an increase in capacity to an existing Small Generating Facility, the Interconnection Request shall be evaluated on the basis of the new total capacity of the Small Generating Facility.

4.8.2 If the Interconnection Request is for a Small Generating Facility that includes multiple energy production devices at a site for which the Interconnection Customer seeks a single Point of Interconnection, the Interconnection Request shall be evaluated on the basis of the aggregate capacity of the multiple devices.

4.8.3 The Interconnection Request shall be evaluated using the maximum rated capacity of the Small Generating Facility.

Attachment 1

Glossary of Terms

10 kW Inverter Process – The procedure for evaluating an Interconnection Request for a certified inverter-based Small Generating Facility no larger than 10 kW that uses the Section 2 screens. The application process uses an all-in-one document that includes a simplified Interconnection Request, simplified procedures, and a brief set of terms and conditions. See Attachment 5 of the Policies and Procedures.

Business Day – Monday through Friday, excluding Federal and State Holidays.

Distribution System – KIUC's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

Distribution Upgrades – The additions, modifications, and upgrades to KIUC's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

Fast Track Process – The procedure for evaluating an Interconnection Request for a certified Small Generating Facility no larger than 2 MW that includes the Section 2 screens, customer options meeting, and optional supplemental review.

Good Utility Practice – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Interconnection Agreement – The KIUC Interconnection Agreement (For Generating Facilities No Larger Than 20 MW) attached to these Policies and Procedures as Attachment 9.

Interconnection Customer – Any entity that proposes to interconnect its Small Generating Facility with KIUC's Transmission or Distribution System.

Interconnection Facilities – KIUC's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to KIUC's electric system.

Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

Interconnection Request – The Interconnection Customer's request, in accordance with the Policies and Procedures, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with KIUC's electric system.

KIUC – Kauai Island Utility Cooperative.

Material Modification – A modification that has a material impact on the cost or timing of any Interconnection Request.

Network Upgrades – Additions, modifications, and upgrades to KIUC's electric system required at or beyond the point at which the Small Generating Facility interconnects with KIUC's electric system to accommodate the interconnection with the Small Generating Facility to KIUC's electric system. Network Upgrades do not include Distribution Upgrades.

Party or Parties – KIUC and the Interconnection Customer, either individually (Party) or together (Parties), as appropriate.

Point of Interconnection – The point where the Interconnection Facilities connect with KIUC's Transmission or Distribution System.

Policies and Procedures – This document titled Small Generator Interconnection Policies and Procedures (For Generating Facilities No Larger Than 20 MW).

Small Generating Facility – The Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

Study Process – The procedure for evaluating an Interconnection Request that includes the Section 3 scoping meeting, feasibility study, system impact study, and facilities study.

Transmission System – The facilities owned, controlled or operated by KIUC that are used to provide transmission service.

Upgrades – The required additions and modifications to KIUC's electric system at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

Attachment 2

SMALL GENERATOR INTERCONNECTION REQUEST
(Application Form)

KAUAI ISLAND UTILITY COOPERATIVE (KIUC):

Designated Contact Person: _____

Address: 4463 Pahee Street, Lihue, HI 96766

Telephone Number: _____

Fax: _____

E-Mail Address: _____

An Interconnection Request is considered complete when it provides all applicable and correct information required below. Per Section 1.5 of the Policies and Procedures, documentation of site control must be submitted with the Interconnection Request.

Processing Fee or Deposit:

If the Interconnection Request is submitted under the Fast Track Process, the non-refundable processing fee is $100.

If the Interconnection Request is submitted under the Study Process, whether a new submission or an Interconnection Request that did not pass the Fast Track Process, the Interconnection Customer shall submit to KIUC a deposit not to exceed $1,000 towards the cost of the feasibility study.

Interconnection Customer Information

Legal Name of the Interconnection Customer (or, if an individual, individual's name)

Name: _____

Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Facility Location (if different from above): _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Alternative Contact Information (if different from the Interconnection Customer)

Contact Name: _____

Title: _____

Address: _____

_____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Application is for: _____New Small Generating Facility
_____Capacity addition to Existing Small Generating Facility

If capacity addition to existing facility, please describe: _____
_____

Will the Small Generating Facility be used for any of the following?

Net Metering? Yes ___ No ___
To Supply Power to the Interconnection Customer? Yes ___No ___
To Supply Power to Others? Yes ____ No ____

For installations at locations with existing electric service to which the proposed Small Generating Facility will interconnect, provide:

_____ _____
(Account Name (Existing Account Number*)

Contact Name: _____

Title: _____

Address: _____

_____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Requested Point of Interconnection: _____

Interconnection Customer's Requested In-Service Date: _____

Small Generating Facility Information
Provide the following information on the Small Generating Facility (not the Interconnection Facilities).

Energy Source: ___ Solar ___ Wind ___ Hydro ___ Hydro Type (e.g. Run-of-River):___
Diesel ___ Natural Gas ___ Fuel Oil ___ Other (state type) _____

Prime Mover: ___Fuel Cell ___Recip Engine ___Gas Turb ___Steam Turb
___Microturbine ___PV ___Other

Type of Generator: ____Synchronous ____Induction ____ Inverter

Generator Nameplate Rating: _____kW (Typical) Generator Nameplate kVAR: _____

Interconnection Customer or Customer-Site Load: _____kW (if none, so state)

Typical Reactive Load (if known): _____

Maximum Physical Export Capability Requested: _____ kW

List components of the Small Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Is the prime mover compatible with the certified protective relay package? ____Yes ____No

Generator (or solar collector)
Manufacturer, Model Name & Number: _____
Version Number: _____

Nameplate Output Power Rating in kW: (Summer) _____ (Winter) _____
Nameplate Output Power Rating in kVA: (Summer) _____ (Winter) _____

Individual Generator Power Factor
Rated Power Factor: Leading: _____Lagging: _____

Total Number of Generators in wind farm to be interconnected pursuant to this
Interconnection Request: _____ Elevation: _____ ___Single phase ___Three phase

Inverter Manufacturer, Model Name & Number (if used): _____

List of adjustable set points for the protective equipment or software: _____

Note: A completed Power Systems Load Flow data sheet must be supplied with the Interconnection Request.

Small Generating Facility Characteristic Data (for inverter-based machines)

Max design fault contribution current: _____ Instantaneous ___ or RMS? ___

Harmonics Characteristics: _____

Start-up requirements: _____

Small Generating Facility Characteristic Data (for rotating machines)

RPM Frequency: _____
(*) Neutral Grounding Resistor (If Applicable): _____

Synchronous Generators:

Direct Axis Synchronous Reactance, Xd: _____ P.U.
Direct Axis Transient Reactance, X'_d: _____P.U.
Direct Axis Subtransient Reactance, X''_d: _____P.U.
Negative Sequence Reactance, X_2: _____ P.U.
Zero Sequence Reactance, X_0: _____ P.U.
KVA Base: _____
Field Volts: _____
Field Amperes: _____

Induction Generators:

Motoring Power (kW): _____
I_2^2t or K (Heating Time Constant): _____
Rotor Resistance, Rr: _____
Stator Resistance, Rs: _____
Stator Reactance, Xs: _____
Rotor Reactance, Xr: _____
Magnetizing Reactance, Xm: _____
Short Circuit Reactance, Xd": _____
Exciting Current: _____
Temperature Rise: _____
Frame Size: _____
Design Letter: _____

Reactive Power Required In Vars (No Load): _____
Reactive Power Required In Vars (Full Load): _____
Total Rotating Inertia, H: _____ Per Unit on kVA Base

Note: Please contact KIUC prior to submitting the Interconnection Request to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

Interconnection Facilities Information

Will a transformer be used between the generator and the point of common coupling? ___Yes ___No

Will the transformer be provided by the Interconnection Customer? ____Yes ____No

Transformer Data (If Applicable, for Interconnection Customer-Owned Transformer):

Is the transformer: ____single phase _____three phase? Size: _____kVA
Transformer Impedance: _____% on _____kVA Base

If Three Phase:
Transformer Primary: _____ Volts _____ Delta _____Wye _____ Wye Grounded
Transformer Secondary: _____ Volts _____ Delta _____Wye _____ Wye Grounded
Transformer Tertiary: _____ Volts _____ Delta _____Wye _____ Wye Grounded

Transformer Fuse Data (If Applicable, for Interconnection Customer-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: _____ Type: _____ Size: _____Speed: _____

Interconnecting Circuit Breaker (if applicable):

Manufacturer: _____ Type: _____
Load Rating (Amps): _____ Interrupting Rating (Amps): _____ Trip Speed (Cycles): _____

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

Setpoint Function	Minimum	Maximum

1. _____ _____ _____

2. _____ _____ _____

3. _____ _____ _____

4. _____ _____ _____

5. _____ _____ _____

6. _____ _____ _____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Current Transformer Data (If Applicable):

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: _____
Type: _____ Accuracy Class: ___ Proposed Ratio Connection: ____

Manufacturer: _____
Type: _____ Accuracy Class: ___ Proposed Ratio Connection: ____

Potential Transformer Data (If Applicable):

Manufacturer: _____
Type: _____ Accuracy Class: ___ Proposed Ratio Connection: ____

Manufacturer: _____
Type: _____ Accuracy Class: ___ Proposed Ratio Connection: ____

General Information

Enclose copy of site electrical one-line diagram showing the configuration of all Small Generating Facility equipment, current and potential circuits, and protection and control schemes. This one-line

diagram must be signed and stamped by a licensed Professional Engineer if the Small Generating Facility is larger than 50 kW. Is One-Line Diagram Enclosed? ____Yes ____No

Enclose copy of any site documentation that indicates the precise physical location of the proposed Small Generating Facility (e.g., USGS topographic map or other diagram or documentation).

Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address) _____

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Available Documentation Enclosed? ___Yes ____No

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).
Are Schematic Drawings Enclosed? ___Yes ____No

Applicant Signature

I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request is true and correct.

For Interconnection Customer:

Signature: _____ Date: _____
Name: _____
Title: _____

Attachment 3

Certification Codes and Standards

IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2002), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms
NEMA MG 1-1998, Motors and Small Resources, Revision 3

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

Attachment 4

Certification of Small Generator Equipment Packages

1.0 Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in Attachment 3 of the Policies and Procedures, (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.

2.0 The Interconnection Customer must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.

3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.

4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.

5.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.

6.0 An equipment package does not include equipment provided by the utility.

7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of the Policies and Procedures shall be considered certified under the Policies and Procedures for use in that state.

Attachment 5

Application, Procedures, and Terms and Conditions for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10 kW ("10 kW Inverter Process")

1.0 The Interconnection Customer ("Customer") completes the Interconnection Request ("Application") and submits it to KIUC ("Company").

2.0 The Company acknowledges to the Customer receipt of the Application within 5 Business Days of receipt.

3.0 The Company evaluates the Application for completeness and notifies the Customer within 15 Business Days of receipt that the Application is or is not complete and, if not, advises what material is missing.

4.0 The Company verifies that the Small Generating Facility can be interconnected safely and reliably using the screens contained in the Fast Track Process in the Policies and Procedures. Unless the Company determines that the Small Generating Facility cannot be interconnected safely and reliably, the Company approves the Application and returns it to the Customer. Note to Customer: Please check with the Company before submitting the Application if disconnection equipment is required.

5.0 After installation, the Customer returns the Certificate of Completion to the Company. Prior to parallel operation, the Company may inspect the Small Generating Facility for compliance with standards which may include a witness test, and may schedule appropriate metering replacement, if necessary.

6.0 The Company notifies the Customer in writing that interconnection of the Small Generating Facility is authorized. If the witness test is not satisfactory, the Company has the right to disconnect the Small Generating Facility. The Customer has no right to operate in parallel until a witness test has been performed, or previously waived by the Company in writing. The Company is obligated to complete this witness test within 15 Business Days of the receipt of the Certificate of Completion. If the Company does not inspect within 15 Business Days or by mutual agreement of the Parties, the witness test is deemed waived.

7.0 Contact Information – The Customer must provide the contact information for the legal applicant (i.e., the Interconnection Customer). If another entity is responsible for interfacing with the Company, that contact information must be provided on the Application.

8.0 Ownership Information – Enter the legal names of the owner(s) of the Small Generating Facility. Include the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either.

9.0 UL1741 Listed – This standard ("Inverters, Converters, and Controllers for Use in Independent Power Systems") addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL1741. This "listing" is then marked on the equipment and supporting documentation.

Application for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10kW

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required at KIUC's discretion. Per Section 1.5 of the Policies and Procedures, documentation of site control must be submitted with the Interconnection Request.

Processing Fee

Not Applicable.

Interconnection Customer

Name: _____

Contact Person: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Contact (if different from Interconnection Customer)

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Owner of the facility (include % ownership by any electric utility): _____

Small Generating Facility Information

Location (if different from above): _____

Name on Account: _____

Account Number: _____

Inverter Manufacturer:_____Model_____

Nameplate Rating: _____ (kW) _____ (kVA) _____ (AC Volts)

Single Phase _____ Three Phase_____

System Design Capacity: _____ (kW) _____ (kVA)

Prime Mover: Photovoltaic ☐ Reciprocating Engine ☐ Fuel Cell ☐

Turbine ☐ Other _____

Energy Source: Solar ☐ Wind ☐ Hydro ☐ Diesel ☐ Natural Gas ☐

Fuel Oil ☐ Other (describe) _____

Is the equipment UL1741 Listed? Yes_____ No ___

If Yes, attach manufacturer's cut-sheet showing UL1741 listing

Estimated Installation Date: _____ Estimated In-Service Date: _____

The 10 kW Inverter Process is available only for inverter-based Small Generating Facilities no larger than 10 kW that meet the codes, standards, and certification requirements of Attachments 3 and 4 of the Polices and Procedures, and when KIUC has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

List components of the Small Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Interconnection Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW and return the Certificate of Completion when the Small Generating Facility has been installed.

Signed: _____ Date: _____

Name: _____

Title: _____

Contingent Approval to Interconnect the Small Generating Facility

(For Company use only)

Interconnection of the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW and the return of the Certificate of Completion.

Company Signature: _____

Title: _____ Date: _____

Application ID number: _____

Company waives inspection/witness test? Yes___No___

Small Generating Facility Certificate of Completion

Is the Small Generating Facility owner-installed? Yes_____ No _____

Interconnection Customer: _____

Contact Person:_____

Address: _____

Location of the Small Generating Facility (if different from above):

_____

City: _____ State: _____ Zip Code: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Electrician:

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

License number: _____

Date Written Approval to Install Facility granted by the Company: _____

Application ID number: _____

Inspection:

I (we) hereby certify that the Small Generating Facility has been installed and inspected in compliance with the local building/electrical code of _____.

Signature (Local electrical wiring inspector, or attach signed electrical inspection):

_____

Print Name: _____

Title: _____

Date: _____

As a condition of interconnection, you are required to send/fax a copy of this form along with a copy of the signed electrical permit to (insert Company information below):

Name: _____

Company: _____

Address: _____

_____

City, State ZIP: _____

Fax: _____

Approval to Energize the Small Generating Facility (For Company use only)

Energizing the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW

Company Signature: _____

Title: _____ Date: _____

Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW

1.0 **Construction of the Facility**
The Interconnection Customer (the "Customer") may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when KIUC (the "Company") approves the Interconnection Request (the "Application") and returns it to the Customer.

2.0 **Interconnection and Operation**
The Customer may operate the Small Generating Facility and interconnect with the Company's electric system once all of the following have occurred:

2.1 Upon completing construction, the Customer will cause the Small Generating Facility to be inspected or otherwise certified in writing by the appropriate local electrical wiring inspector with jurisdiction, and

2.2 The Customer returns the Certificate of Completion to the Company, and

2.3 The Company has either:

2.3.1 Completed its inspection of the Small Generating Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. All inspections must be conducted by the Company, at its own expense, within 15 Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Company shall provide a written statement that the Small Generating Facility has passed inspection or shall notify the Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place; or

2.3.2 If the Company does not schedule an inspection of the Small Generating Facility within 15 Business Days after receiving the Certificate of Completion, the witness test is deemed waived (unless the Parties agree otherwise); or

2.3.3 The Company has waived the right to inspect the Small Generating Facility.

2.4 The Company has the right to disconnect the Small Generating Facility in the event of improper installation or failure to return the Certificate of Completion.

2.5 Revenue quality metering equipment must be installed and tested in accordance with applicable ANSI standards.

3.0 **Safe Operations and Maintenance**
The Customer shall be fully responsible to operate, maintain, and repair the Small Generating Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

4.0 **Access**

The Company shall have access to the disconnect switch (if the disconnect switch is required) and metering equipment of the Small Generating Facility at all times. The Company shall provide reasonable notice to the Customer when possible prior to using its right of access.

5.0 **Disconnection**

The Company may temporarily disconnect the Small Generating Facility upon the following conditions:

5.1 For scheduled outages upon reasonable notice.

5.2 For unscheduled outages or emergency conditions.

5.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.

5.4 The Company informs the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

6.0 **Indemnification**

The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7. 0 **Insurance**

The Parties agree to follow all applicable insurance requirements imposed by the state in which the Point of Interconnection is located. All insurance policies must be maintained with insurers authorized to do business in that state.

8.0 **Limitation of Liability**

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0 above.

9.0 **Termination**

The agreement to operate in parallel may be terminated under the following conditions:

9.1 **By the Customer**

By providing written notice to the Company.

9.2 **By the Company**

If the Small Generating Facility fails to operate for any consecutive 12 month period or the Customer fails to remedy a violation of these Terms and Conditions within the time period established by the Company.

9.3 **Permanent Disconnection**
In the event this Agreement is terminated, the Company shall have the right to disconnect its facilities or direct the Customer to disconnect its Small Generating Facility.

9.4 **Survival Rights**
This Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.

10.0 **Assignment/Transfer of Ownership of the Facility**
This Agreement shall survive the transfer of ownership of the Small Generating Facility to a new owner only with the written approval of the Company, which approval will be made subject to, among other things, the new owner agreeing in writing to comply with the terms of this Agreement and the Policies and Procedures.

Attachment 6

Feasibility Study Agreement

THIS AGREEMENT is made and entered into this_____day of_____ 20___ by and between_____, a_____organized and existing under the laws of the State of _____ ("Interconnection Customer"), and KAUAI ISLAND UTILITY COOPERATIVE, an electric cooperative, organized and existing under the laws of the State of Hawaii ("Cooperative"). Interconnection Customer and Cooperative each may be referred to as a "Party," or collectively as the "Parties."

RECITALS

WHEREAS, Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by Interconnection Customer on_____; and

WHEREAS, Interconnection Customer desires to interconnect the Small Generating Facility with KIUC's electric system; and

WHEREAS, Interconnection Customer has requested KIUC to perform a feasibility study to assess the feasibility of interconnecting the proposed Small Generating Facility with KIUC's electric system.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the Small Generator Interconnection Policies and Procedures (For Generating Facilities No Larger Than 20 MW) ("Policies and Procedures").

2.0 The Interconnection Customer elects and KIUC shall cause to be performed an interconnection feasibility study consistent with the Policies and Procedures.

3.0 The scope of the feasibility study shall be subject to the assumptions set forth in Attachment A to this Agreement.

4.0 The feasibility study shall be based on the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the scoping meeting. KIUC reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary

consistent with Good Utility Practice during the course of the feasibility study and as designated in accordance with the Policies and Procedures. If the Interconnection Customer modifies its Interconnection Request, the time to complete the feasibility study may be extended by agreement of the Parties.

5.0 In performing the study, KIUC shall rely, to the extent reasonably practicable, on existing studies of recent vintage. The Interconnection Customer shall not be charged for such existing studies; however, the Interconnection Customer shall be responsible for charges associated with any new study or modifications to existing studies that are reasonably necessary to perform the feasibility study.

6.0 The feasibility study report shall provide the following analyses for the purpose of identifying any potential adverse system impacts that would result from the interconnection of the Small Generating Facility as proposed:

6.1 Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;

6.2 Initial identification of any thermal overload or voltage limit violations resulting from the interconnection;

6.3 Initial review of grounding requirements and electric system protection; and

6.4 Description and non-binding estimated cost of facilities required to interconnect the proposed Small Generating Facility and to address the identified short circuit and power flow issues.

7.0 The feasibility study shall model the impact of the Small Generating Facility regardless of purpose in order to avoid the further expense and interruption of operation for reexamination of feasibility and impacts if the Interconnection Customer later changes the purpose for which the Small Generating Facility is being installed.

8.0 The study shall include the feasibility of any interconnection at a proposed project site where there could be multiple potential Points of Interconnection, as requested by the Interconnection Customer and at the Interconnection Customer's cost.

9.0 A deposit of the greater of 50 percent of the good faith estimated feasibility study costs or earnest money of $1,000 may be required from the Interconnection Customer.

10.0 Once the feasibility study is completed, a feasibility study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the feasibility study must be completed and the feasibility study report transmitted within 45 Business Days after this Agreement is signed by the Parties.

11.0 Any study fees shall be based on KIUC's actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.

12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice. If the deposit exceeds the invoiced fees, KIUC shall refund such excess within 30 calendar days of the invoice without interest.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

KAUAI ISLAND UTILITY COOPERATIVE	**[Insert name of Interconnection Customer]**
By _____	By _____
Name: _____	Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

Attachment A to
Feasibility Study Agreement

Assumptions Used in Conducting the Feasibility Study

The feasibility study will be based upon the information set forth in the Interconnection Request and agreed upon in the scoping meeting held on _____:

1) Designation of Point of Interconnection and configuration to be studied.

2) Designation of alternative Points of Interconnection and configuration.

1) and 2) above are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and KIUC, as applicable.

Attachment 7

System Impact Study Agreement

THIS AGREEMENT is made and entered into this_____day of_____ 20___ by and between_____, a_____organized and existing under the laws of the State of _____ ("Interconnection Customer"), and KAUAI ISLAND UTILITY COOPERATIVE, an electric cooperative, organized and existing under the laws of the State of Hawaii ("KIUC"). Interconnection Customer and KIUC each may be referred to as a "Party," or collectively as the "Parties."

RECITALS

WHEREAS, the Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by the Interconnection Customer on_____; and

WHEREAS, the Interconnection Customer desires to interconnect the Small Generating Facility with KIUC's electric system;

WHEREAS, KIUC has completed a feasibility study and provided the results of said study to the Interconnection Customer (This recital to be omitted if the Parties have agreed to forego the feasibility study.); and

WHEREAS, the Interconnection Customer has requested KIUC to perform a system impact study(s) to assess the impact of interconnecting the Small Generating Facility with KIUC's electric system.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the Small Generator Interconnection Policies and Procedures (For Generating Facilities No Larger Than 20 MW) ("Policies and Procedures").

2.0 The Interconnection Customer elects and KIUC shall cause to be performed a system impact study(s) consistent with the Policies and Procedures.

3.0 The scope of a system impact study shall be subject to the assumptions set forth in Attachment A to this Agreement.

4.0 A system impact study will be based upon the results of the feasibility study and the technical information provided by the Interconnection Customer in the Interconnection Request. KIUC reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the system impact study. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the system impact study may be extended by KIUC.

5.0 A system impact study shall consist of a short circuit analysis, a stability analysis, a power flow analysis, voltage drop and flicker studies, protection and set point coordination studies, and grounding reviews, as necessary. A system impact study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. A system impact study shall provide a list of facilities that are required as a result of the Interconnection Request and non-binding good faith estimates of cost responsibility and time to construct.

6.0 A distribution system impact study shall incorporate a distribution load flow study, an analysis of equipment interrupting ratings, protection coordination study, voltage drop and flicker studies, protection and set point coordination studies, grounding reviews, and the impact on electric system operation, as necessary.

7.0 A distribution system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within 45 Business Days after this Agreement is signed by the Parties. A transmission system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within 60 Business Days after this Agreement is signed by the Parties.

8.0 A deposit of the equivalent of one-half of the good faith estimated cost of a distribution system impact study and one-half of the good faith estimated cost of a transmission system impact study may be required from the Interconnection Customer in KIUC's discretion.

9.0 Any study fees shall be based on KIUC's actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.

10.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, KIUC shall refund such excess within 30 calendar days of the invoice without interest.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

KAUAI ISLAND UTILITY COOPERATIVE	**[Insert name of Interconnection Customer]**
By_____	By_____
Name:_____	Name:_____
Title:_____	Title:_____
Date:_____	Date:_____

Attachment A to System Impact Study Agreement

Assumptions Used in Conducting the System Impact Study

The system impact study shall be based upon the results of the feasibility study, subject to any modifications in accordance with the Policies and Procedures, and the following assumptions:

1) Designation of Point of Interconnection and configuration to be studied.

2) Designation of alternative Points of Interconnection and configuration.

1) and 2) above are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and KIUC, as applicable.

Attachment 8

Facilities Study Agreement

THIS AGREEMENT is made and entered into this_____day of_____ 20___ by and between_____, a_____organized and existing under the laws of the State of _____ ("Interconnection Customer"), and KAUAI ISLAND UTILITY COOPERATIVE, an electric cooperative, organized and existing under the laws of the State of Hawaii ("KIUC"). Interconnection Customer and KIUC each may be referred to as a "Party," or collectively as the "Parties."

RECITALS

WHEREAS, the Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by the Interconnection Customer on_____; and

WHEREAS, the Interconnection Customer desires to interconnect the Small Generating Facility with KIUC's electric system;

WHEREAS, KIUC has completed a system impact study and provided the results of said study to the Interconnection Customer; and

WHEREAS, the Interconnection Customer has requested KIUC to perform a facilities study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the system impact study in accordance with Good Utility Practice to physically and electrically connect the Small Generating Facility with KIUC's Transmission System.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the Small Generator Interconnection Policies and Procedures (For Generating Facilities No Larger Than 20 MW) ("Policies and Procedures").

2.0 The Interconnection Customer elects and KIUC shall cause a facilities study consistent with the Policies and Procedures.

3.0 The scope of the facilities study shall be subject to data provided in Attachment A to this Agreement.

4.0 The facilities study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s). The facilities study shall also identify (1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, (2) the nature and estimated cost of KIUC's Interconnection Facilities and Upgrades necessary to accomplish the interconnection, and (3) an estimate of the time required to complete the construction and installation of such facilities.

5.0 KIUC may propose to group facilities required for more than one Interconnection Customer in order to minimize facilities costs through economies of scale, but any Interconnection Customer may require the installation of facilities required for its own Small Generating Facility if it is willing to pay the costs of those facilities.

6.0 A deposit of the good faith estimated facilities study costs may be required from the Interconnection Customer in KIUC's discretion.

7.0 In cases where Upgrades are required, the facilities study must be completed within 60 Business Days after this Agreement is signed by the Parties. In cases where no Upgrades are necessary, and the required facilities are limited to Interconnection Facilities, the facilities study must be completed within 45 Business Days after this Agreement is signed by the Parties.

8.0 Once the facilities study is completed, a facilities study report shall be prepared and transmitted to the Interconnection Customer. .

9.0 Any study fees shall be based on KIUC's actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.

10.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, KIUC shall refund such excess within 30 calendar days of the invoice without interest.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

KAUAI ISLAND UTILITY COOPERATIVE	**[Insert name of Interconnection Customer]**
By_____	By_____
Name:_____	Name:_____
Title:_____	Title:_____
Date:_____	Date:_____

Attachment A to
Facilities Study Agreement

Data to Be Provided by the Interconnection Customer with the Facilities Study Agreement

Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

On the one-line diagram, indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one-line diagram, indicate the location of auxiliary power. (Minimum load on CT/PT) Amps

One set of metering is required for each generation connection to the new ring bus or existing KIUC station. Number of generation connections: _____

Will an alternate source of auxiliary power be available during CT/PT maintenance?
Yes _____ No _____

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes _____ No _____
(Please indicate on the one-line diagram).

What type of control system or PLC will be located at the Small Generating Facility?

_____

_____

What protocol does the control system or PLC use?

_____

_____

Please provide a 7.5-minute quadrangle map of the site. Indicate the plant, station, transmission line, and property lines.

Physical dimensions of the proposed interconnection station:

_____

Bus length from generation to interconnection station:

_____

Line length from interconnection station to KIUC's Transmission or Distribution System.

_____

Tower number observed in the field. (Painted on tower leg)*:

_____

Number of third party easements required for transmission lines*:

_____

* To be completed in coordination with Transmission Provider.

_____

Please provide the following proposed schedule dates:

Begin Construction	Date:_____
Generator step-up transformers receive back feed power	Date:_____
Generation Testing	Date:_____
Commercial Operation	Date:_____

Attachment 9

KAUAI ISLAND UTILITY COOPERATIVE

INTERCONNECTION AGREEMENT

(For Generating Facilities No Larger Than 20 MW)

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Page No.

INTERCONNECTION AGREEMENT

This INTERCONNECTION AGREEMENT ("Agreement") is made and entered into this _____ day of _____, 20__, by and between KAUAI ISLAND UTILITY COOPERATIVE ("Cooperative"), and _____ ("Interconnection Customer"), each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

Cooperative Information

Cooperative: Kauai Island Utility Cooperative
Attention: President & CEO and Chief Engineer
Address: 4463 Pahee Street
City: Lihue State: Hawai'i Zip: 96766
Phone: _____ Fax: _____

Interconnection Customer Information

Interconnection Customer: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____

Interconnection Customer Application No: _____ (Cooperative to Fill Out)

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

Article 1. Scope and Limitations of Agreement

1.1 This Agreement shall be used for all Interconnection Requests submitted under the Cooperative's Small Generator Interconnection Policies and Procedures (For Generating Facilities No Larger Than 20 MW) ("Policies and Procedures"), except for those submitted under the 10 kW Inverter Process contained in Attachment 5 of the Policies and Procedures.

1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Cooperative's Transmission and Distribution System.

1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate Purchase Power Agreements or Tariff provisions, as applicable.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Cooperative and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, Good Utility Practice, and any other requirements imposed by the Cooperative.

1.5.3 The Cooperative shall construct, operate, and maintain its Transmission and Distribution System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct and operate its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Cooperative.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Cooperative and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Cooperative's Transmission and/or Distribution System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area,

including, but not limited to: 1) the rules and procedures concerning the operation or generation set forth in the Tariff or Purchase Power Agreement for the Cooperative's Transmission and Distribution System; 2) the Operating Requirements set forth in Attachment 5 of this Agreement; and (3) Good Utility Practice.

1.7 Metering

The Interconnection Customer shall be responsible for the Cooperative's costs incurred for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

1.8 Reactive Power

1.8.1 The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Cooperative has established different requirements that apply to all similarly situated generators in the control area on a comparable basis. The requirements of this paragraph shall not apply to wind generators.

1.8.2 The Cooperative is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Cooperative requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1 above.

1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule or as designated in the Purchase Power Agreement.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

Article 2. Inspection, Testing, Authorization, and Right of Access

2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Cooperative of such activities no fewer than five Business Days (or as may be otherwise agreed to by the Parties in writing) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Cooperative may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the

testing. The Interconnection Customer shall provide to the Cooperative a written test report when such testing and inspection is completed.

2.1.2 The Cooperative shall provide to the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Cooperative of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

2.2 Authorization Required Prior to Parallel Operation

2.2.1 The Cooperative shall use Reasonable Efforts to list applicable parallel operation requirements and operational test criteria in Attachment 5 of this Agreement. Additionally, the Cooperative shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Cooperative shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Cooperative's Transmission System without prior written authorization of the Cooperative. The Cooperative will provide such authorization once the Cooperative receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements to ensure that said operation will be consistent with safety, reliability and power quality standards. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

2.3 Right of Access

2.3.1 Upon reasonable notice, the Cooperative may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Cooperative at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or potentially hazardous condition, the Cooperative shall have access to the Interconnection Customer's premises for any reasonable purpose in

connection with the performance of the obligations imposed on it by this Agreement or if the Cooperative otherwise believes it necessary to meet its legal obligation to provide service to its customers.

2.3.3 Each Party shall be responsible for its own costs associated with following this article.

Article 3. Effective Date, Term, Termination, and Disconnection

3.1 Effective Date

This Agreement shall become effective upon execution by the Parties. The Cooperative shall promptly file this Agreement with the Hawaii Public Utilities Commission ("Commission") upon execution, if required.

3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of _____ years from the Effective Date, and shall thereafter be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination.

3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Cooperative 20 Business Days written notice.

3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.

3.3.3 Either Party may terminate this Agreement at the end of the then existing term by providing at least thirty (30) days written notice to the other before the commencement of the subsequent one-year renewal period.

3.3.4 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Cooperative's Transmission and/or Distribution System, as applicable. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this Agreement or such non-terminating Party otherwise is responsible for these costs under this Agreement.

3.3.5 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

3.3.6 This provisions of this article shall survive termination or expiration of this Agreement.

3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Cooperative, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission or Distribution System, the Cooperative's Interconnection Facilities; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Cooperative may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Cooperative shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Cooperative promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Cooperative's Transmission and/or Distribution System. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Cooperative may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Cooperative's Transmission or Distribution System when necessary for routine maintenance, construction, and repairs on the Cooperative's Transmission or Distribution System. The Cooperative shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Cooperative shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage on the Cooperative's system, the Cooperative may suspend interconnection service to effect immediate repairs on the Cooperative's Transmission and/or Distribution System. The Cooperative shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Cooperative shall, upon request, provide the Interconnection

Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Cooperative shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the electric system, or if operating the Small Generating Facility could cause damage to the Cooperative's Transmission and/or Distribution System. Supporting documentation used to reach the decision to disconnect or Derate shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Cooperative may disconnect or Derate the Small Generating Facility and, at its option, terminate this Agreement. The Cooperative shall provide the Interconnection Customer with five Business Day notice of such disconnection, Deration and/or termination, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Cooperative before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission and/or Distribution System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Cooperative's prior written authorization, the latter shall have the right to temporarily or permanently disconnect the Small Generating Facility and/or terminate this Agreement.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Cooperative's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades

4.1 Interconnection Facilities

4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Cooperative shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with

other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Cooperative.

4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Cooperative's Interconnection Facilities.

4.2 Distribution Upgrades

The Cooperative shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Cooperative and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

Article 5. Cost Responsibility for Network Upgrades

5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

5.2 Network Upgrades

The Cooperative shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Cooperative and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Cooperative elects at its discretion to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

Article 6. Billing, Payment, Milestones, and Financial Security

6.1 Billing and Payment Procedures and Final Accounting

6.1.1 The Cooperative shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties in writing. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties in writing.

6.1.2 Within three months of completing the construction and installation of the Cooperative's Interconnection Facilities and/or Upgrades described in the

Attachments to this Agreement, the Cooperative shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Cooperative for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Cooperative shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Cooperative within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Cooperative shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by written agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer material uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of any discrete portion of the Cooperative's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Cooperative, at the Interconnection Customer's option, a guarantee, a surety bond or a letter of credit. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Cooperative's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Cooperative under this Agreement during its term. In addition:

6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Cooperative, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Cooperative and must specify a reasonable expiration date.

Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Cooperative of any such assignment;

7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Cooperative, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Cooperative of any such assignment.

7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

7.5 Force Majeure

7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation

or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided below, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

7.6.3 Notwithstanding anything in this Agreement to the contrary, in the event of any Default by the Interconnection Customer that the Cooperative believes may have a material impact on the safety or reliability of the Transmission and/or

Distribution System or that may otherwise cause an Emergency Condition or endanger life or property, the Cooperative shall have the immediate right to terminate this Agreement. In that case, the Cooperative shall have the right to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

Article 8. Insurance

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Cooperative, except that the Interconnection Customer shall show proof of insurance to the Cooperative no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Cooperative agrees to maintain general liability insurance or self-insurance consistent with the Cooperative's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Cooperative's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

Article 9. Confidentiality

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement, all design, system and operating specifications, and metering data provided by or to the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Notwithstanding the above, Confidential Information does not include information in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

Article 10. Disputes

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written notice of dispute. Such notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within 10 Business Days after receipt of the notice, either Party shall have the right to request that the Commission serve as an arbiter of last resort. In such an event, the Commission will use an informal expedited process to resolve the dispute within 30 days of the date of the request. In doing so, the Commission shall have the right to authorize its Chairman, or his/her designee (which designee may be another Commissioner, a member of the Commission staff, a Commission hearings officer, or a Commission hired consultant) to take any such action on behalf of the Commission, in consultation with other Commissioners and Commission staff. There shall be no right to hearing or appeal from this informal expedited dispute resolution process.

10.4 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half each of any costs paid to neutral third parties.

10.5 If neither Party elects to seek assistance from the Commission, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement and the Policies and Procedures.

Article 11. Taxes

11.1 The Parties agree to follow all applicable local state and federal tax laws and regulations, consistent with Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Cooperative's tax-exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

Article 12. Miscellaneous

12.1 Governing Law, Regulatory Authority, and Rules
The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of Hawaii (i.e., where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

12.2 Amendment
The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

12.3 No Third-Party Beneficiaries
This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

12.4 Waiver

12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Cooperative. Any waiver of this Agreement shall, if requested, be provided in writing.

12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all of which shall constitute one and the same instrument.

12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. In recognition of this, the Parties agree to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority.

12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of

any publicly available reports filed with any governmental authorities addressing such events.

12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Cooperative be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

Article 13. Notices

13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national currier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:

Interconnection Customer: _____

Attention: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

If to the Cooperative:

Cooperative: Kauai Island Utility Cooperative
Attention: _____
Address: 4463 Pahee Street
City: Lihue State: Hawaii Zip: 96766
Phone: _____ Fax: _____

13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____

Cooperative: Kauai Island Utility Cooperative
Attention: Accounting
Address: 4463 Pahee Street
City: Lihue State: Hawaii Zip: 96766
Phone: _____ Fax: _____

13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____

If to the Cooperative:

Cooperative: Kauai Island Utility Cooperative
Attention: _____
Address: 4463 Pahee Street
City: Lihue State: Hawaii Zip: 96766
Phone: _____ Fax: _____

13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Interconnection Customer: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____

Cooperative's Operating Representative:

Name: _____
Address: 4463 Pahee Street
City: Lihue State: Hawaii Zip: 96766
Phone: _____ Fax: _____

13.5 Changes to the Notice Information
Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

Article 14. Signatures

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Cooperative: KAUAI ISLAND UTILITY COOPERATIVE

Signature: _____

Name: _____

Title: President and Chief Executive Officer

Date: _____

For the Interconnection Customer

Signature: _____

Name: _____

Title: _____

Date: _____

Attachment 1

Glossary of Terms

Allowed Net Capacity - The maximum electrical output of the Interconnection Customer's Small Generating Facility in Megawatts (MW), which is used by the Cooperative for establishing a maximum instantaneous MW output from the Interconnection Customer's Small Generating Facility for planning and operating the Cooperative's system.

Applicable Laws and Regulations – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Business Day – Monday through Friday, excluding Federal and State Holidays.

Commission – the Hawai'i Public Utilities Commission.

Cooperative – Kauai Island Utility Cooperative, which is the member-owned electric cooperative serving the island of Kauai.

Default – The failure of a breaching Party to perform or comply with any provisions in the Small Generator Interconnection Agreement.

Derate/Deration - Reduction of Allowed Net Capacity.

Distribution System – The Cooperative's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

Distribution Upgrades – The additions, modifications, and upgrades to the Cooperative's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

Good Utility Practice – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Governmental Authority – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Cooperative, or any Affiliate thereof.

Interconnection Customer – Any entity that proposes to interconnect its Small Generating Facility with the Cooperative's Transmission and/or Distribution System.

Interconnection Facilities – The Cooperative's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Cooperative's Transmission and/or Distribution System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

Interconnection Request – The Interconnection Customer's request, in accordance with the Policies and Procedures, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Cooperative's Transmission and/or Distribution System.

Material Modification – A modification that has a material impact on the cost or timing of any Interconnection Request.

Network Upgrades – Additions, modifications, and upgrades to the Cooperative's Transmission and/or Distribution System required at or beyond the point at which the Small Generating Facility interconnects with the Cooperative's Transmission and/or Distribution System to accommodate the interconnection of the Small Generating Facility with the Cooperative's Transmission and/or Distribution System. Network Upgrades do not include Distribution Upgrades.

Operating Requirements – Any operating and technical requirements that may be applicable due to the control area, or the Cooperative's requirements, including those set forth in Kauai Island Utility Cooperative Small Generator Interconnection Agreement and/or the Policies and Procedures.

Party or Parties – The Cooperative and the Interconnection Customer, either individually (Party) or together (Parties).

Point of Interconnection – The point where the Interconnection Facilities connect with the Cooperative's Transmission and/or Distribution System.

Policies and Procedures – The document titled Small Generator Interconnection Policies and Procedures (For Generating Facilities No Larger Than 20 MW).

Reasonable Efforts – With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Small Generating Facility – The Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

Transmission System – The facilities owned, controlled or operated by the Cooperative

Upgrades – The required additions and modifications to the Cooperative's Transmission and/or Distribution System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

Attachment 2

Description and Costs of the Small Generating Facility, Interconnection Facilities, and Metering Equipment

Equipment, including the Small Generating Facility, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by the Interconnection Customer or the Cooperative. The Cooperative will provide a best estimate itemized cost, including overheads, of its Interconnection Facilities and metering equipment, and a best estimate itemized cost of the annual operation and maintenance expenses associated with its Interconnection Facilities and metering equipment.

Attachment 3

One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment, and Upgrades

Attachment 4

Milestones

Parallel operation In-Service Date: _____

Critical milestones and responsibilities as agreed to by the Parties:

	Milestone/Date	**Responsible Party**
(1)	_____	_____
(2)	_____	_____
(3)	_____	_____
(4)	_____	_____
(5)	_____	_____
(6)	_____	_____
(7)	_____	_____
(8)	_____	_____
(9)	_____	_____
(10)	_____	_____

Agreed to by:

KAUAI ISLAND UTILITY COOPERATIVE

By_____

Name:_____

Title:_____

Date:_____

[Insert name of Interconnection Customer]

By_____

Name:_____

Title:_____

Date:_____

Attachment 5

Additional Operating Requirements for the Cooperative's Transmission and/or Distribution System Needed to Support the Interconnection Customer's Needs

The Cooperative shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation and operations test criteria after connecting with the Cooperative's Transmission and/or Distribution System.

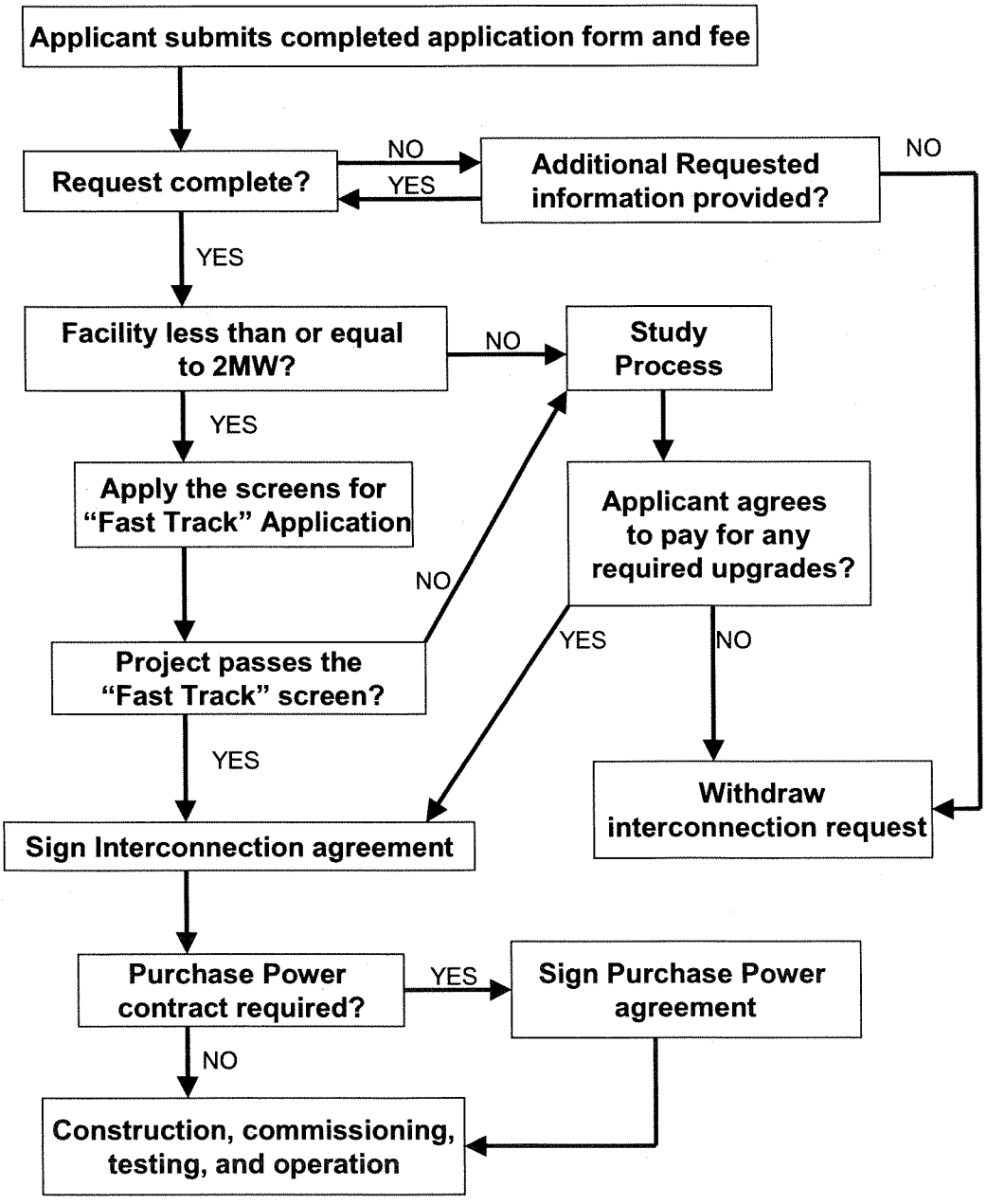
Attachment 6

Cooperative's Description of its Upgrades and Best Estimate of Upgrade Costs

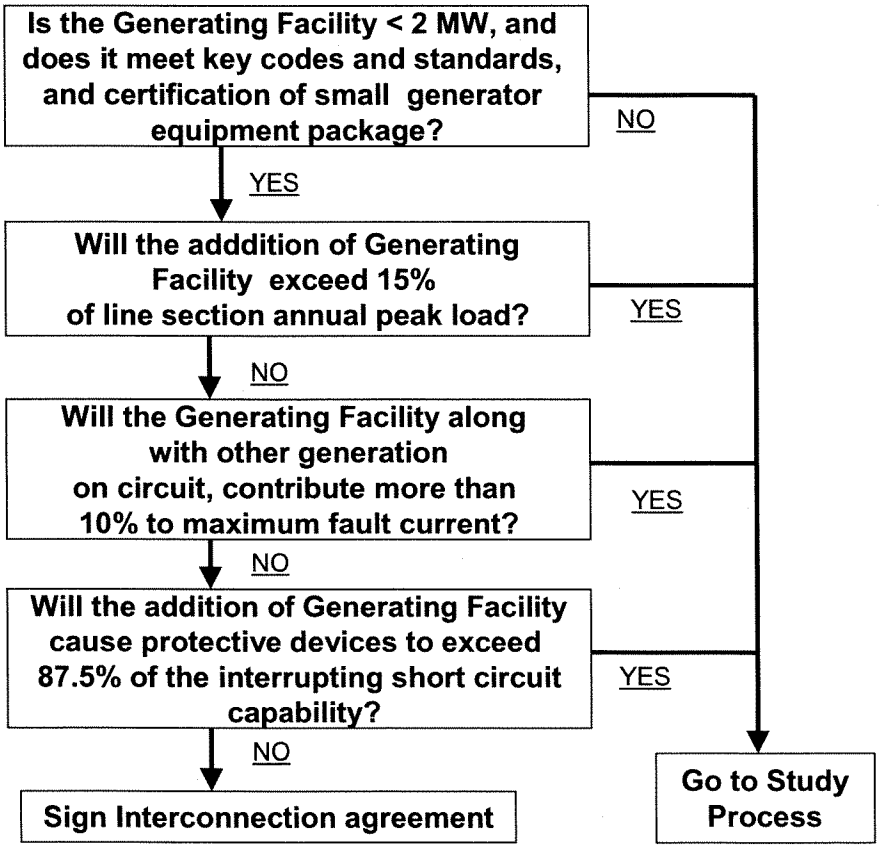
The Cooperative shall describe Upgrades and provide an itemized best estimate of the cost, including overheads, of the Upgrades and annual operation and maintenance expenses associated with such Upgrades. The Cooperative shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.

EXHIBIT 2

KIUC Application Process



KIUC Fast Track
Screening Process



KIUC
Study Process